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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,094	11/25/2003	Kie Y. Ahn	303.560US4	7159
21186	7590	01/24/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			KIM, PAUL D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,094

Applicant(s)

AHN ET AL.

Examiner

Paul D Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 31-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-21, 23-25, 27-30 and 34 is/are rejected.
- 7) ☒ Claim(s) 22 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/25/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is a response to the amendment filed on 10/29/2004.

Claim Objections

1. Claims 14-17 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 13, 17, 18 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Kitamura (US PAT. 6,448,879).

Kitamura teaches a process of making a coil component comprising steps of:
depositing a layer of magnetic material (2) on a substrate (1) as shown in Fig. 1;
depositing a non-magnetic insulating layer (3) on the magnetic material layer; forming a substantially circular open inductor (4) in the non-magnetic insulating layer and above

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the magnetic material layer, the open inductor pattern having an outer edge (5); depositing a second non-magnetic insulating layer (6) on the open inductor pattern; and depositing a second magnetic material layer (7) deposited on the second non-magnetic insulating layer as shown in Fig. 1 (see also col. 3, lines 1-55).

As per claim 17 the second non-magnetic insulating layer includes an organic insulator such as material having resin.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14-16, 19-21, 23-25 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura.

Kitamura teaches all of the limitations as set forth above except materials used in the substantially circular open inductor (conductive material) and the non-magnetic insulating layer. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to apply the conductive material for the substantially circular open inductor and the insulating material for the non-magnetic insulating layer as recited in the claimed invention because Applicant has not disclosed that the conductive material and the insulating material as recited in the claimed invention provides an advantage, is used for a particular purpose, or solves a

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stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Kitamura because the conductive material for the substantially circular open inductor as recited in the claimed invention would perform equally well such as the coil (equivalent with a conductive material) and the insulating material for the non-magnetic insulating layer as recited in the claimed invention would perform equally well such as the insulation layer of Kitamura. Therefore, it would have been an obvious matter of design choice to modify the conductive material for the substantially circular open inductor and the insulating material for the non-magnetic insulating layer of Kitamura to obtain the invention as specified in claims 14-16, 19 and 29.

It would be also obvious matter of design choice to modify the magnetic material and the second non-magnetic insulating material of Kitamura to obtain the invention as specified in claims 20, 21, 24, 25, 28 and 30.

As per claims 23 and 27 Kitamura also teaches that the substrate is made of a magnetic substrate. Even though Kitamura does not specify a material used for the magnetic substrate as recited in the claimed invention, it would be also obvious matter of design choice to modify the magnetic substrate of Kitamura to obtain the invention as specified in claims 23 and 27 because Applicant has not disclosed that the material as recited in the claimed invention provides an advantage, is used for a particular purpose, or solves a stated problem.

Allowable Subject Matter

6. Claims 22 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose the claimed invention such as the second magnetic material including NiFe alloy having about 81% Ni and 19% Fe. It is not obvious taken alone or in combination of other references fairly to suggest the claimed invention.

Response to Arguments

8. Applicant's arguments with respect to claims 13-30 and 34 have been considered but are moot in view of the new ground of rejection.


Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Friday between 8:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim
Examiner
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